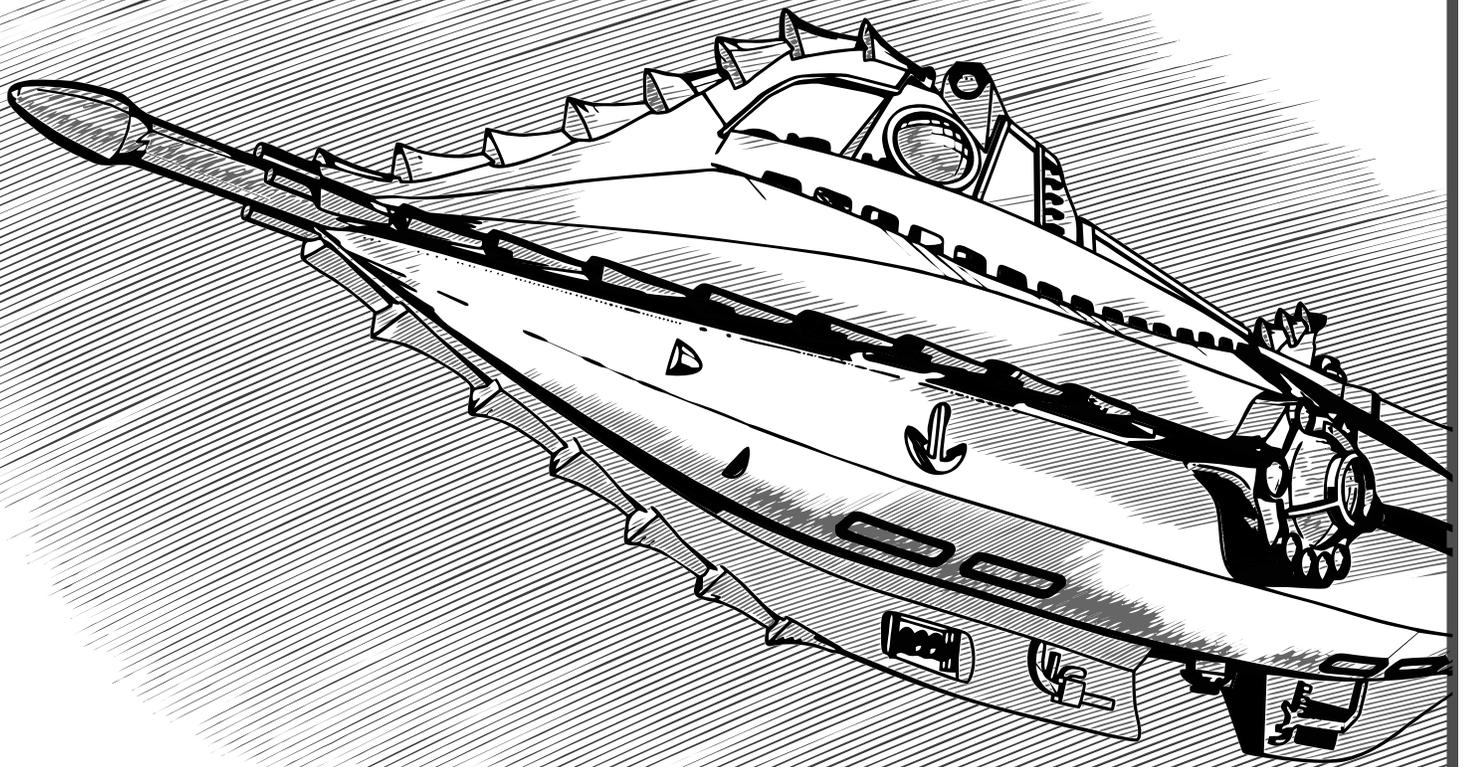




20K Submarine

16 Inch Long Resin Model Assembly Kit

MMNA-001



Masters by the
renowned model maker

Scott Brodeen

16" Nautilus from 20,000 Leagues Under Sea

Necessary tools:

- X-Acto knife and blades
- Tweezers
- Miscellaneous files and sand-papers
- Cyanoacrylate (CA) & Epoxy glues
- Testor's clear plastic cement

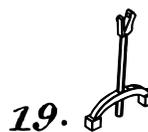
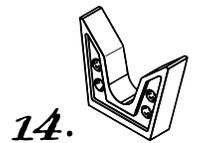
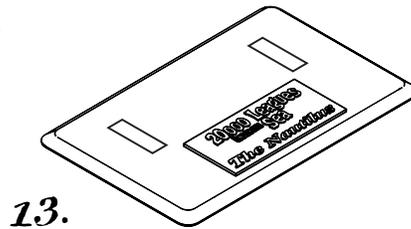
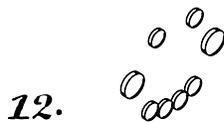
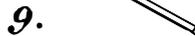
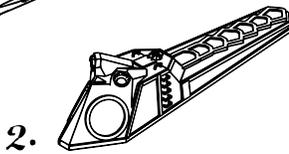
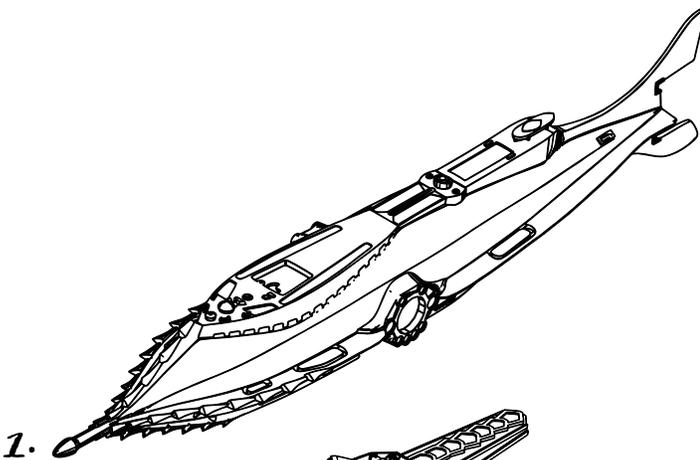
Recommended Paints:

- Model Master's Fiat Euro Gray
- Model Master's Flat Black
- Model Master's Rust
- Model Master's Metallic Gray
- Model Master's Gunmetal
- Model Master's Metallic Gold
- Model Master's Metallic Brass
- Model Master's Red

Remove all parts from the box and inspect for any possible damage, or missing parts. It is a good idea to soak all the parts in a mild dish detergent to remove all mold release residues.

Parts Manifest:

1. 1 Main body
2. 1 Wheelhouse
3. 1 Front Rake
4. 1 Dorsal fin
5. 1 Rudder
6. 1 hatch
7. 3 Hatch wheels
8. 2 iris inserts
9. 4 Prop ring supports
10. 1 Prop ring
11. 1 Prop
12. 1 Set 4/6 mm wiggly eyes for windows
13. 1 Base
14. 2 Base supports
15. 1 Ships Wheel
16. 1 Speed screw
17. 2 Anchors
18. 2 Salon Window Frames
19. 2 levers
20. 1 Wheel Stand
21. 1 set of clear domes



2. Find the base plate and two upright supports and using cyanoacrylate glue (gap filing or medium is best for this step) apply two small droplets on to the scribed areas where the uprights are to be positioned. (Figure 1.) After installing both uprights, prime with a suitable primer, and set aside to dry thoroughly. To finish the base, it is recommended that you use a dark color to provide a suitable amount of contrast to the submarine's rust brown.

Figure 1.

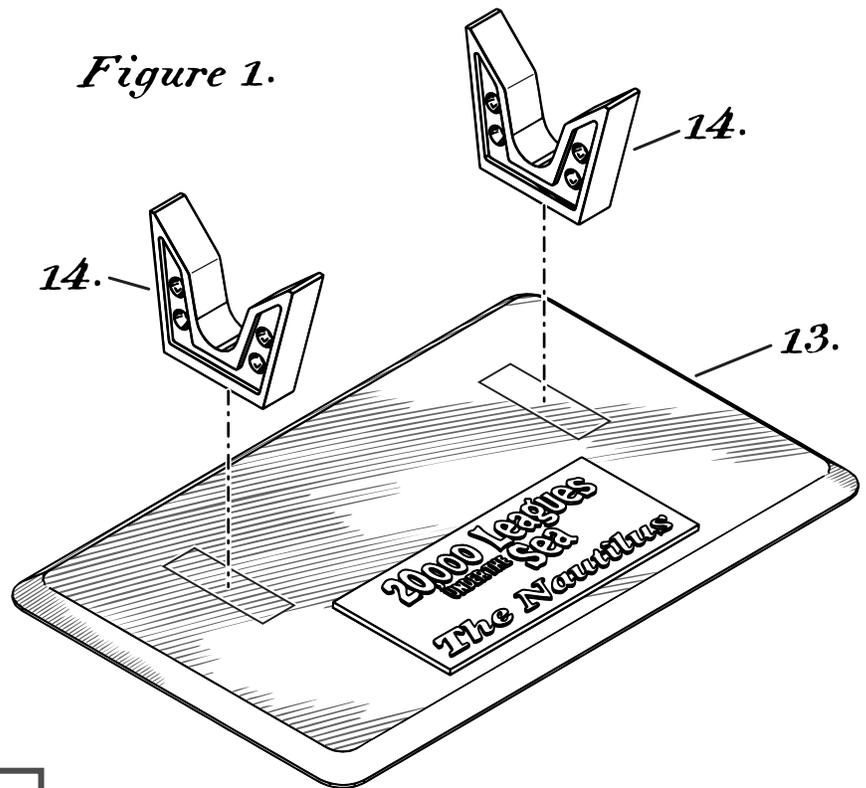
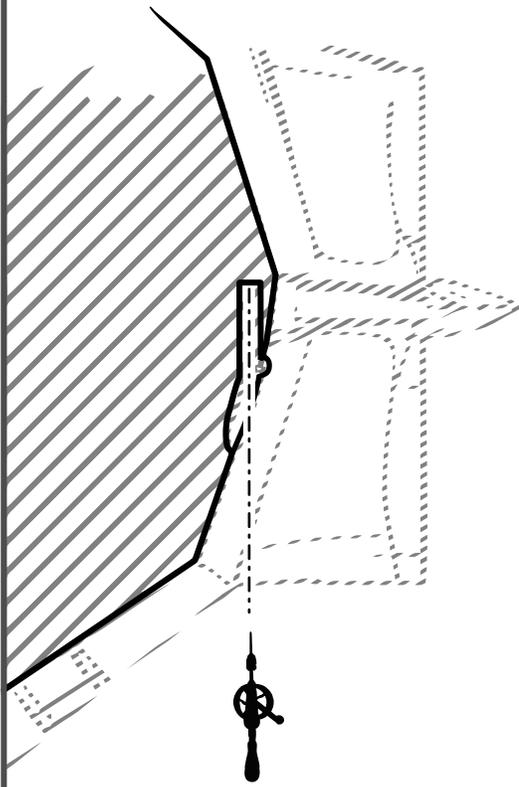


Figure 2.

3. Carefully bore a .0781" hole (#47 drill bit) about 1/2" deep into the anchor cups.



4. Add a small drop of cyanoacrylate into each of the anchor cups and position the anchors until they are seated.

Figure 3.

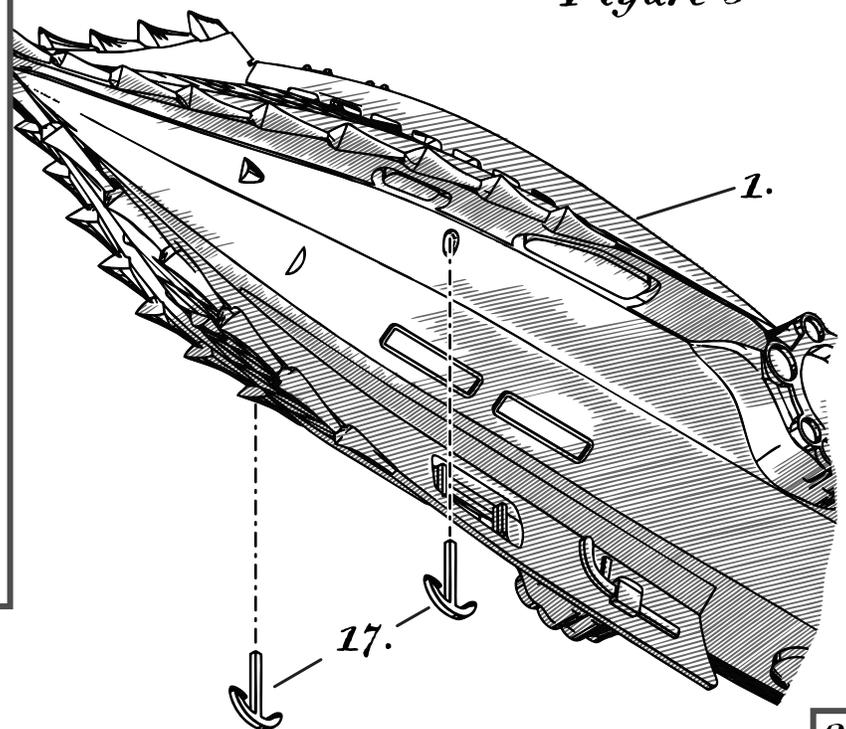
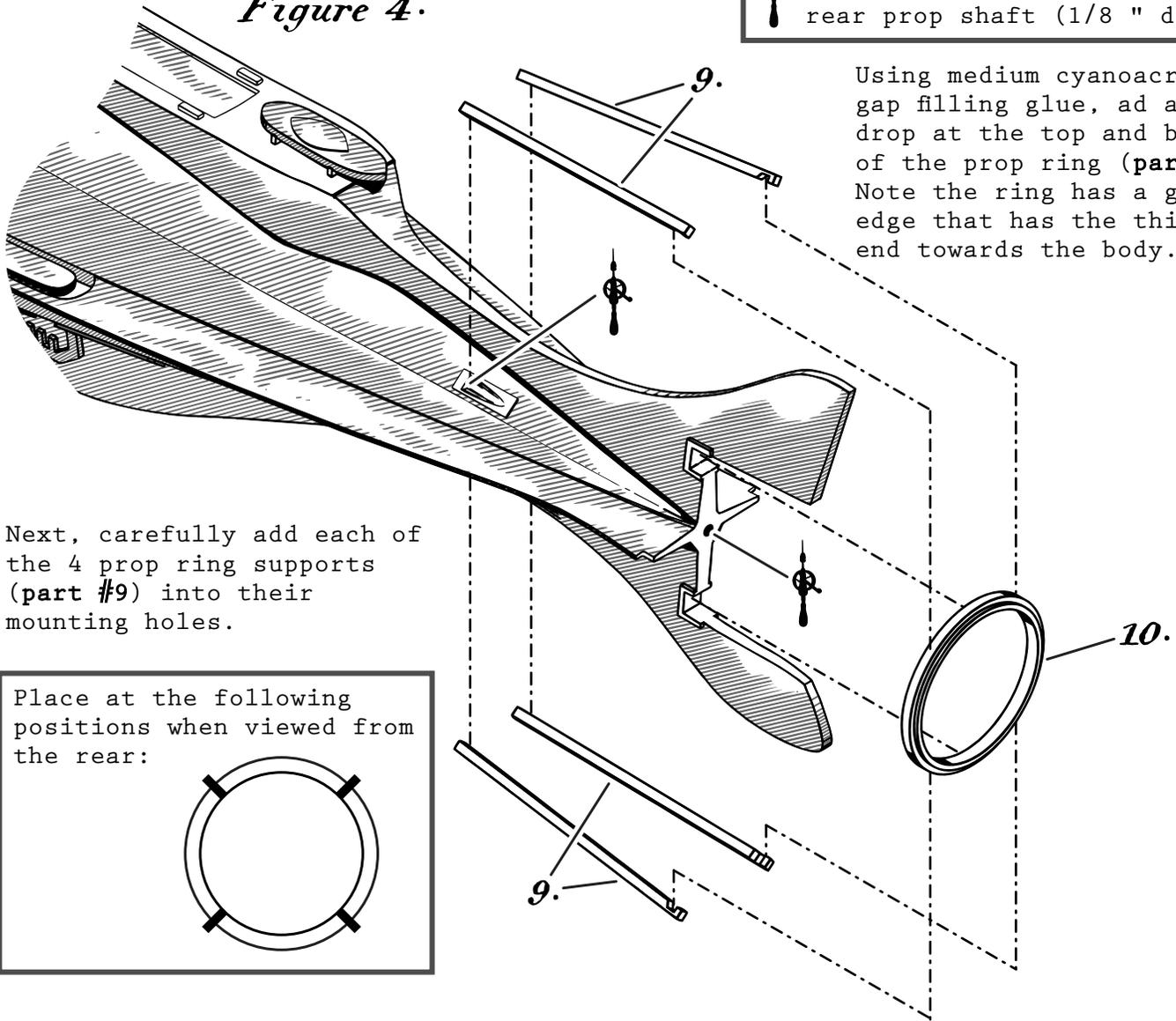


Figure 4.

Use a .089" drill bit (#43) for the rear prop guards and rear prop shaft (1/8" deep)



Using medium cyanoacrylate gap filling glue, ad a small drop at the top and bottom of the prop ring (part #10) Note the ring has a grooved edge that has the thicker end towards the body.

Figure 5.

Install the rear prop

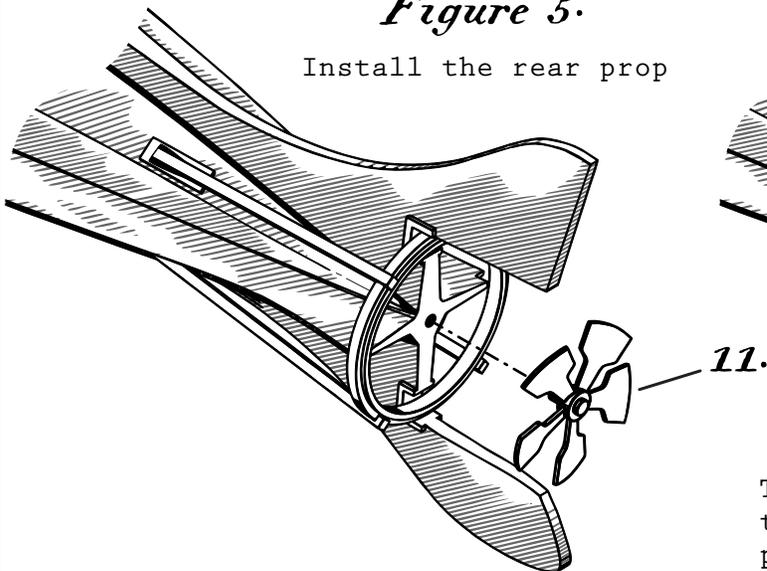
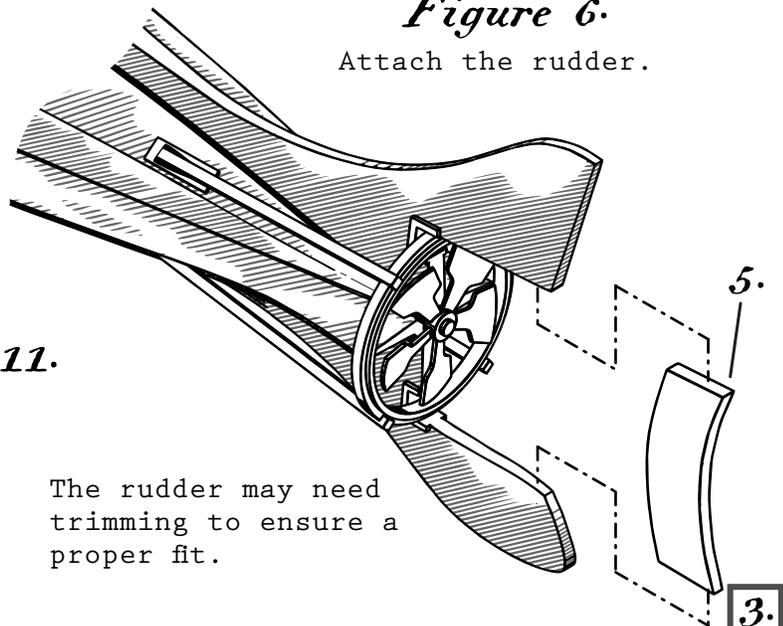


Figure 6.

Attach the rudder.



(figure 8.)with CA glue attach the Dorsal Fin (part #4) the Rear Hatch (part #6) and the Window Iris (part #8) Place a small drop of CA on the Rear Hatch and the Belly Hatch, then position the Hatch Wheels (part #7).

(figure 9.)
Glue the Bow Hatch Wheel

Figure 8.

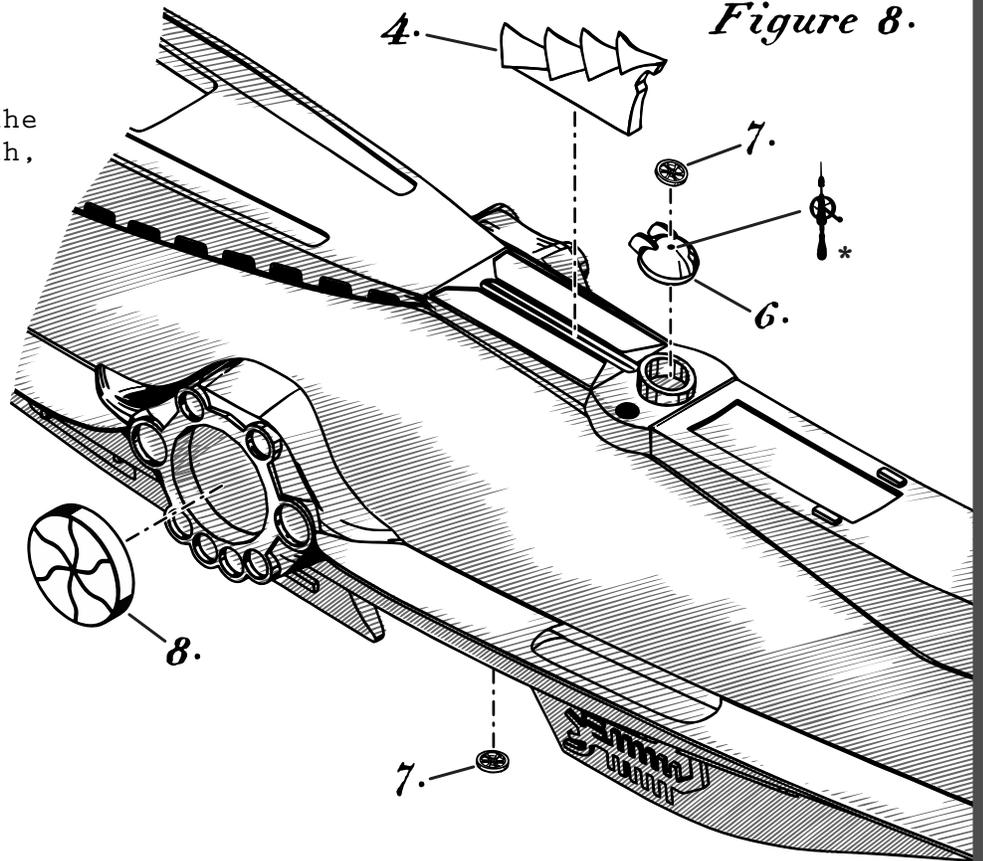
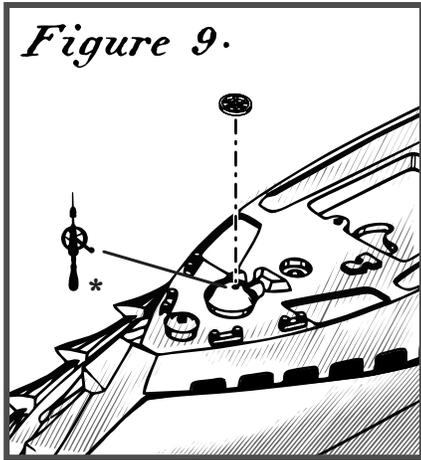


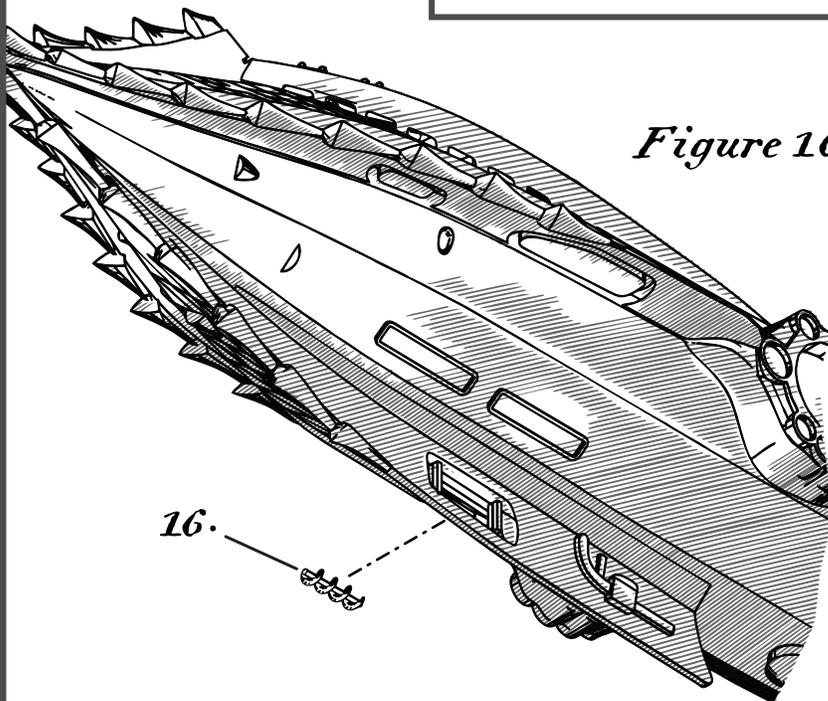
Figure 9.



(Optional) Using a very small bit, drill holes into the top of the hatches, then place pins cut from fine wire (not provided) into the hatches with a drop of CA, finally locate the hatch wheels on the pins with an additional drop of CA.

hatch wheel	—	
wire pin	—	
hatch	—	

Figure 10.



(Figure 10) Install the speed screw (part #16) into the lower forward raker arch compartment. Make sure to carefully file and trim this area for a proper snug fit.

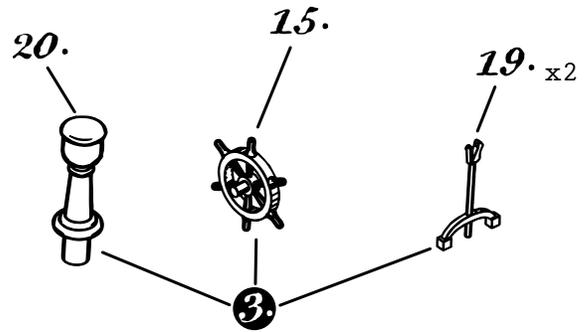
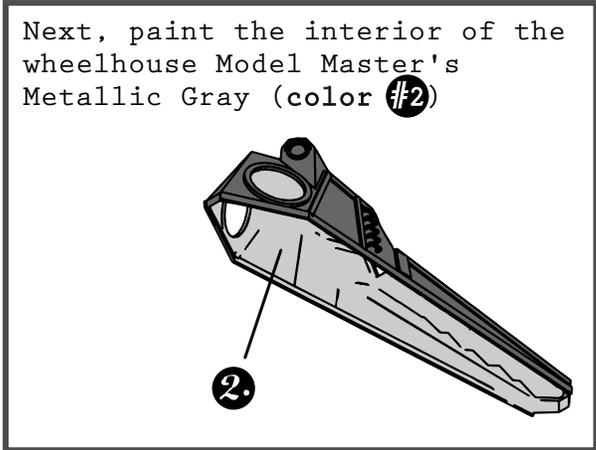
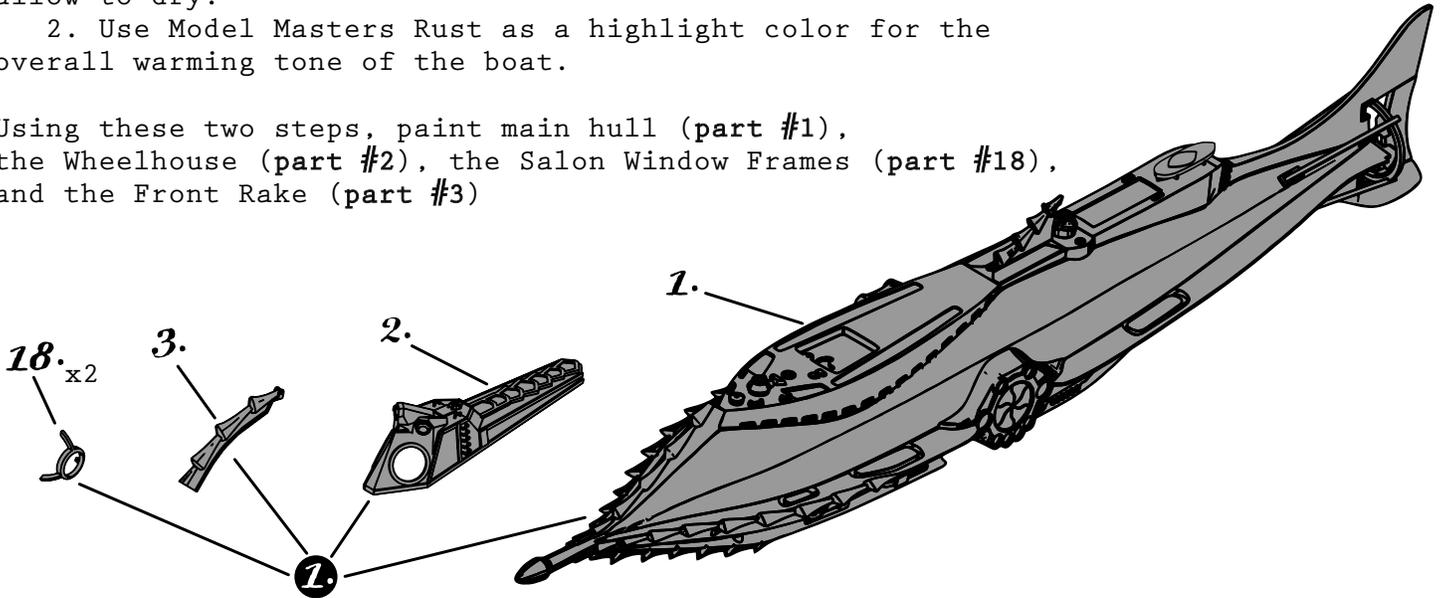
Before moving forward, this is a good time to prime and paint the model.

The base finish (color #1) of the Nautilus is made up of two color steps:

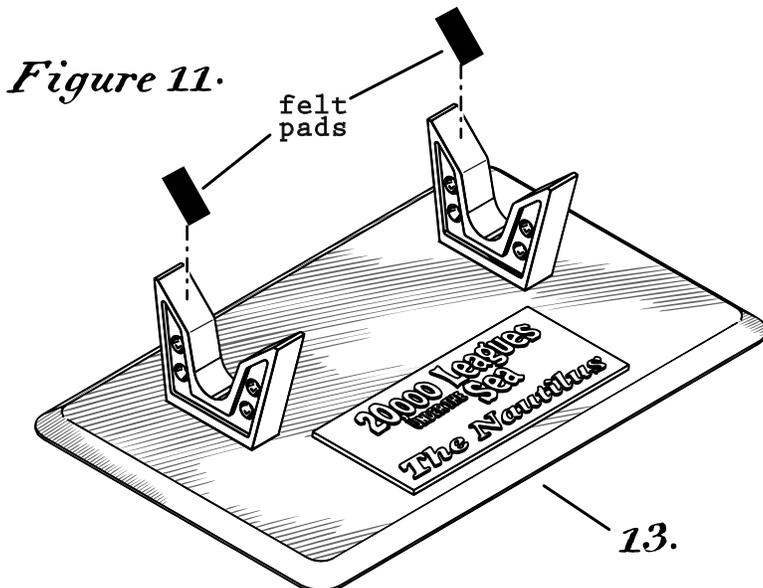
1. The base coat is 2 parts Model Master's Euro Gray, 1 part Model Master's Rust, and 1/2 part Model Master's Flat Black. Paint all body parts that color and allow to dry.

2. Use Model Masters Rust as a highlight color for the overall warming tone of the boat.

Using these two steps, paint main hull (part #1), the Wheelhouse (part #2), the Salon Window Frames (part #18), and the Front Rake (part #3)

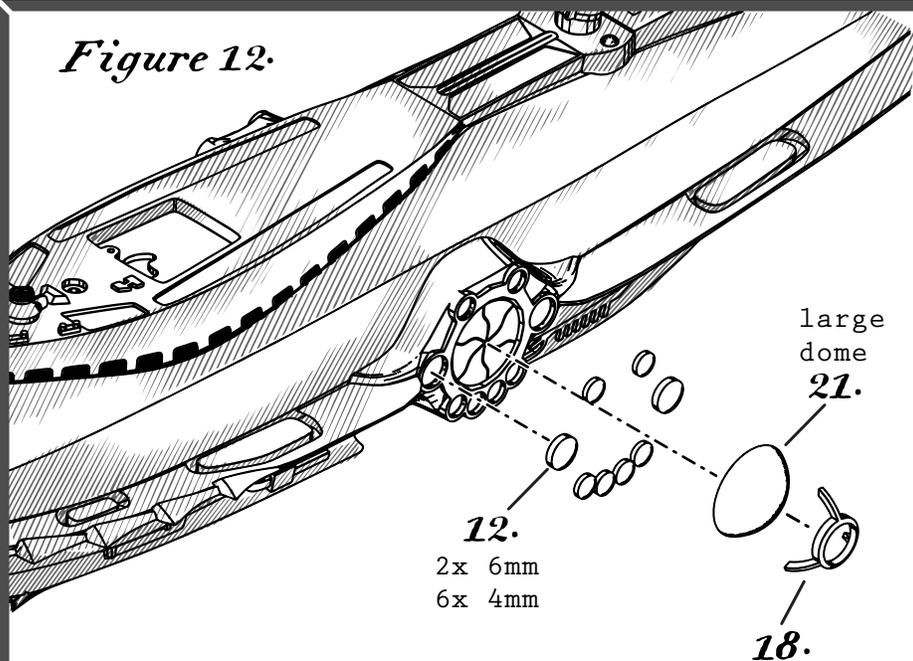


Prime and paint the Wheel Stand (part #20), Ships Wheel (part #15), and Levers (part #19) with Model Masters Brass (color #3)



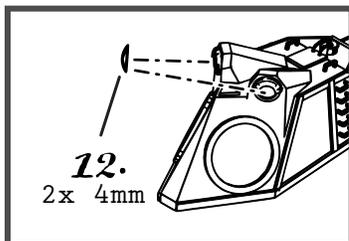
(Figure 11) Add small thin black felt pads (not provided) to the upper regions of the support arms of the painted base to keep from scratching the finish of the submarine.

Figure 12.



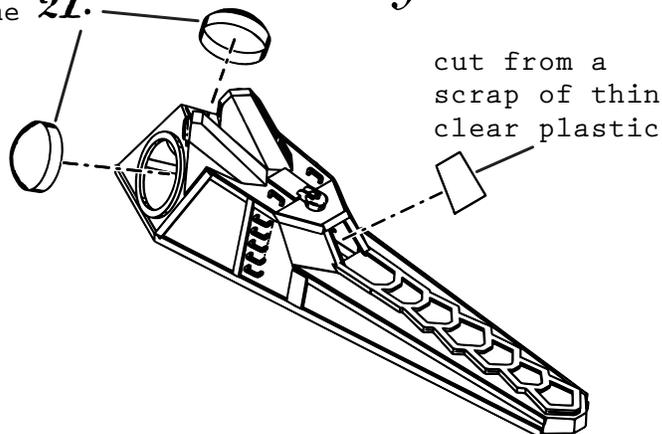
(Figure 12) Cut the black wiggly eye from the clear bubble (parts #12) and using Tester's clear part cement, install into frame holes as shown. Next install the salon window larger main dome (part #21) and tri-spoke window frame (part #18)

(Figure 13) Again, using Tester's clear part cement place the two smaller wheel house bubbles (part #21). Cut the eyes from two 4mm wiggly eyes (part #12) and use the Testor's clear cement to adhere them. Cut a small piece of clear plastic for the rear wheelhouse window and install from the inside.



small dome 21.

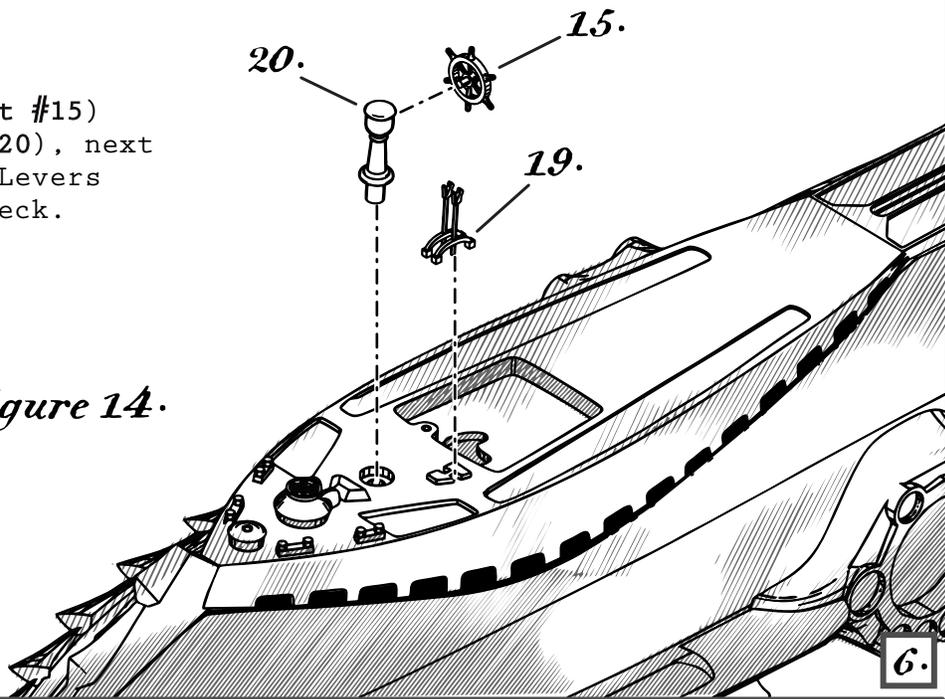
Figure 13.



cut from a scrap of thin clear plastic

Install the Ships Wheel (part #15) into the Wheel Stand (part #20), next install the Wheel Stand and Levers (part #19) on to the cabin deck.

Figure 14.



(Figure 15) Once everything has dried, and you are happy with the wheelhouse interior, use CA and carefully cement the wheelhouse to the main deck. Also, install the front raker to the top front edge of the wheelhouse, between the alligator eyes.

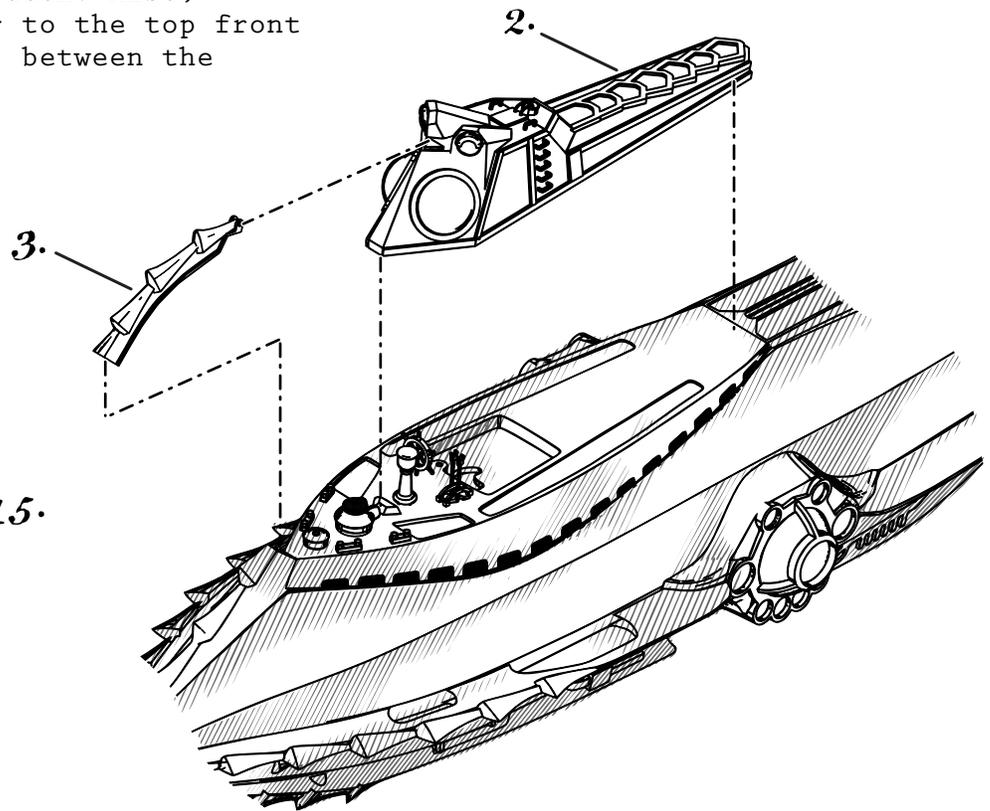


Figure 15.

Completed model

